REMARKS/ARGUMENTS

The claims are 2-9 and 13. Claim 12 has been canceled, and new method claim 13 has been added in order to overcome the rejection under 35 USC §102. Claim 9 has been amended to overcome the rejection under 35 USC §102. Claims 2-8 have been amended to depend on new claim 13 and comply with the expressions therein. Reconsideration is expressly requested.

The Applicants greatly appreciate the Examiner's detailed Office Action mailed on September 10, 2004.

In view of the Office Action, the Applicants have amended the claims as set forth herein. Further, the Applicants have attached Exhibit A and Exhibit B, pointing out the difference between the present invention and Phan (U.S. Patent No. 6,661,429, AU 755524B, and DE 197 46 329 A1), for consideration by the Examiner.

First, the Applicants would like to explain the invention according to claims 9 and 13 with reference to Exhibit A (page 1).

As claimed in claims 9 and 13:

> N pieces of pixel data adjacent to one another in the bitmap image data are regarded as one pixel-data group *(in Exhibit A, 4 pieces of pixel data (each piece of pixel data is expressed as a grid in the 4 x 4 matrix) are regarded as one pixel-data group (in Exhibit A, each pixel-data group is surrounded by a square))*;

each pixel-data group is correlated to the first, second, or third color lamp, as shc A;

the relevant-color gradation values of t said pixel data included in that pixel-da sequentially supplied, one-by-one accor predetermined order, to make the relevan correlated to that pixel-data group emit ligh *A, at "TIMING 1" the red gradation value of pi pixel-data group correlated to red lamp R1 is su the green gradation value of pixel #2 of the pix correlated to green lamp G1 is supplied there gradation value of pixel #5 of the pixel-data gr to green lamp G2 is supplied thereto, and the b value of pixel #6 of the pixel-data group corre lamp B1 is supplied thereto; at "TIMING 2" the value of pixel #2 of the pixel-data group corr lamp R1 is supplied thereto, the green gradation #3 of the pixel-data group correlated to gree supplied thereto, the green gradation value o the pixel-data group correlated to green lamp G thereto, and the blue gradation value of pix pixel-data group correlated to blue lamp B1 thereto; at "TIMING 3" the red gradation value of the pixel-data group correlated to red lamp R thereto, the green gradation value of pixe pixel-data group correlated to green lamp G1 thereto, the green gradation value of pixel pixel-data group correlated to green lamp G2*

thereto, and the blue gradation value of pixel #11 of the pixel-data group correlated to blue lamp B1 is supplied thereto; and at "TIMING 4" the red gradation value of pixel #5 of the pixel-data group correlated to red lamp R1 is supplied thereto, the green gradation value of pixel #6 of the pixel-data group correlated to green lamp G1 is supplied thereto, the green gradation value of pixel #9 of the pixel-data group correlated to green lamp G2 is supplied thereto, and the blue gradation value of pixel #10 of the pixel-data group correlated to blue lamp B1 is supplied thereto); and

while the gradation value of a certain color in one piece of pixel data is being used for activating a lamp of that color, the gradation values of the other two colors in that piece of pixel data are not used for activating any lamps (*in Exhibit A, at for example "TIMING 1" the green and blue gradation values of pixel #1 are not used, the red and blue gradation values of pixel #2 are not used, the red and blue gradation values of pixel #5 are not used, and the red and green gradation values of pixel #6 are not used.*)

The Applicants believe that the above-mentioned configuration of the present invention is not disclosed in, nor obvious from, Phan.

Although Pham does not explicitly disclose its image-data configuration and the correlation between the data and the static/dynamic pixels, it is believed, from carefully reading Phan, that what Phan is doing can be explained with reference to Exhibit A (page 2) and Exhibit B.

As shown in Exhibit A (page 2), Phan groups the lamps on the display screen into so-called "static pixels" and "dynamic pixels", which are actually "groups of lamps" (shown on the left side of page 2). At each timing, the "groups of lamps" and the pixel data (shown on the right side of page 2) being used for activating the "groups of lamps" are shifted, so that the display screen can be used for displaying image data having a larger number of pixel data than the number of lamps on the display screen. Exhibit B shows an actual product available from Mitsubishi Electric that seems to be using the method of Phan.

However, the way that Phan supplies the pixel data to the lamps is apparently different from that of the present invention. In Phan, the RGB gradation values belonging to a single pixel data are all supplied at the same time, i.e., <u>while the gradation value of a certain color in one piece of pixel data is being used for activating a lamp of that color, the gradation values of the other two colors in that piece of pixel data are used for activating other lamps.</u>

For example, attention is paid to TIMING 1. In Phan, it can be noted that supplying of the red gradation value of pixel #1 to the red lamp R1, supplying of the green gradation value of pixel #1 to the green lamps G1 and G2, and supplying of the blue gradation value of pixel #1 to the blue lamp B1, all occur at the same timing.

On the other hand, in the present invention, the green and blue gradation values of pixel #1 <u>are not used</u> while the red gradation value of pixel #1 is being used for the red lamp R1, the red and blue gradation values of pixel #2 <u>are not used</u> while the green

ue of pixel #2 is being used for the green lamp G1, lue gradation values of pixel #5 are not used while dation value of pixel #5 is being used for the green he red and green gradation values of pixel #6 are not

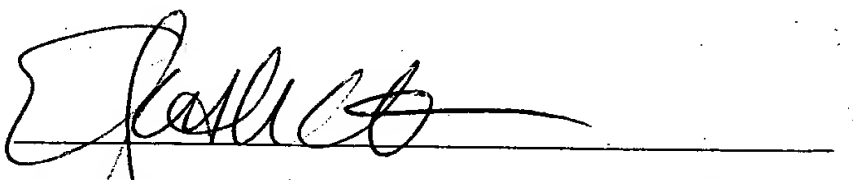
e blue gradation value of pixel #6 is being used for B1.

ıcept of the present invention is neither disclosed s from, Phan. Therefore, the Applicants believe that nd inventiveness (non-obviousness) of the present not denied by Phan, and that claims 9 and 13 should Allowable claim 13 renders dependent claims 2-8 vell.

ry, claims 2-9 have been amended, claim 12 has been ew claim 13 has been added. In view of the foregoing, ully requested that the claims be allowed and that assed to issue.

Respectfully Submitted,

TOYOTARO TOKIMOTO ET AL. (RCE)



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ibits A and B and RCE

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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10, on the date indicated above, and is addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

D. Mittendorf

~~Maria Guastella~~
I. Mittendorf

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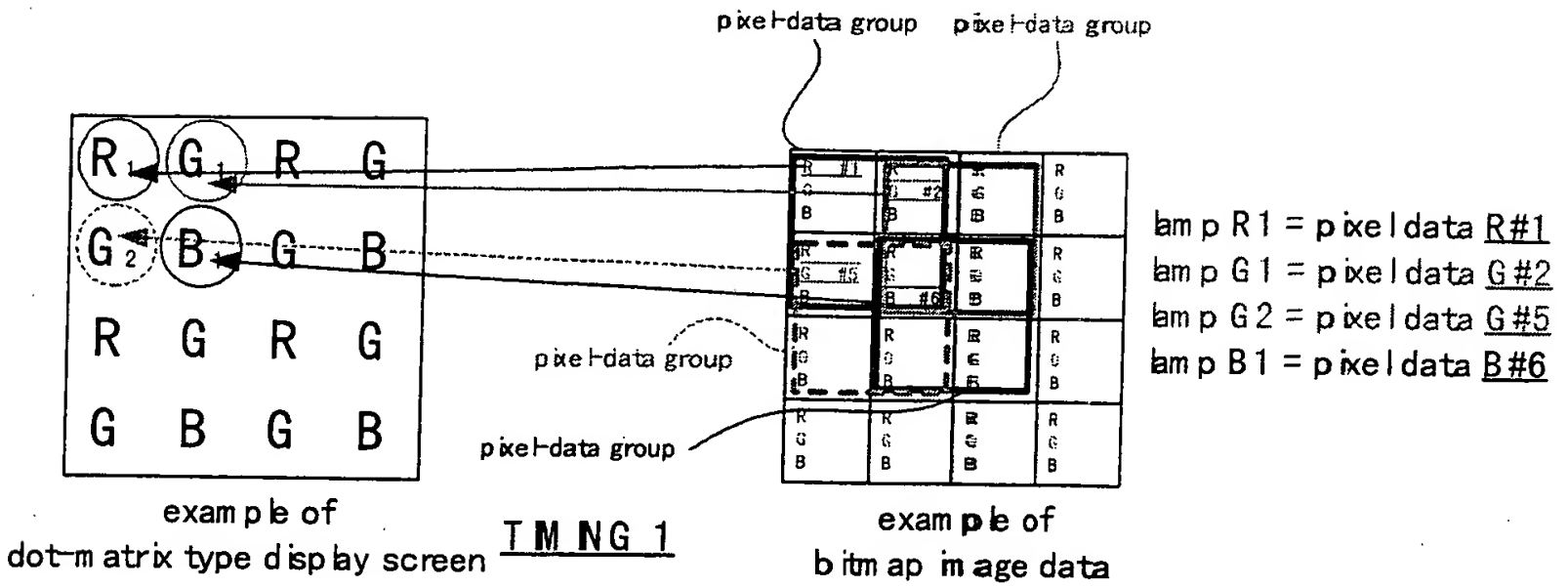
EXHIBIT A

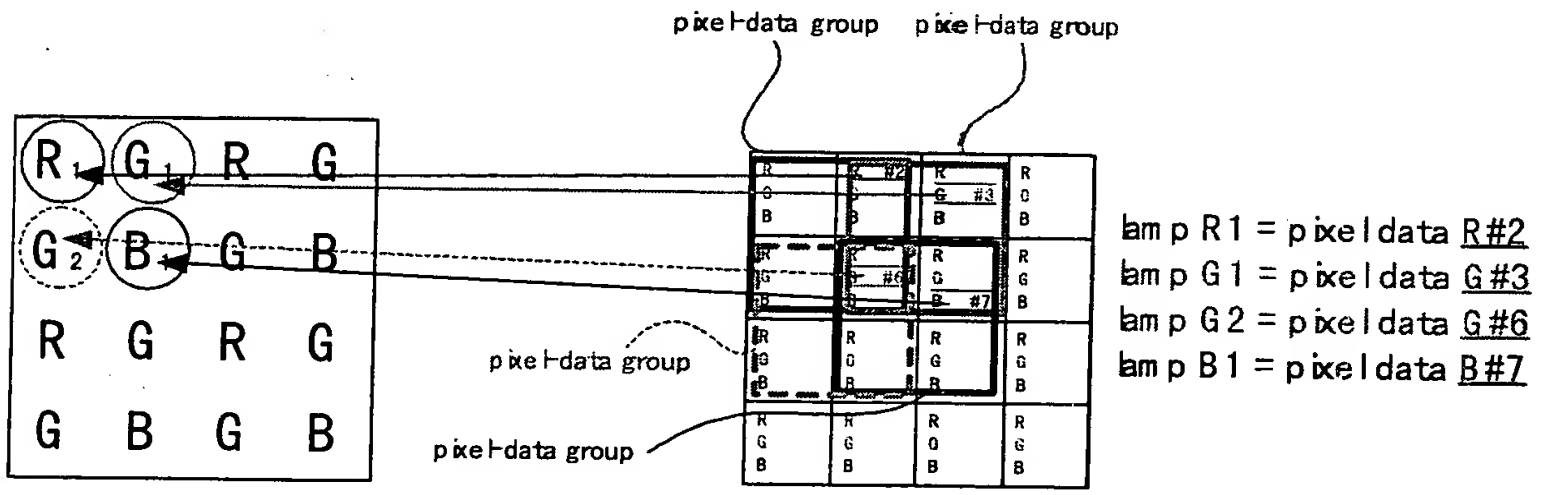
CONCEPTUAL EXAMPLE OF PRESENT INVENTION

(for explanation purpose only)



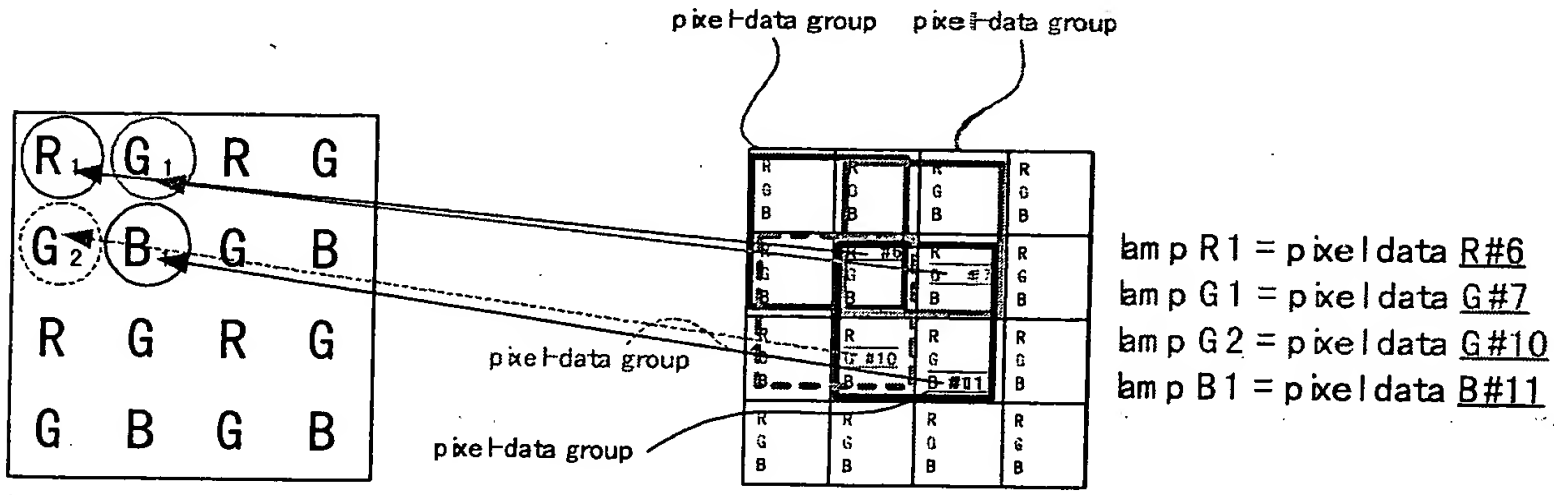
lamp R1 = pixel data R#1
lamp G1 = pixel data G#2
lamp G2 = pixel data G#5
lamp B1 = pixel data B#6

TIMING 1



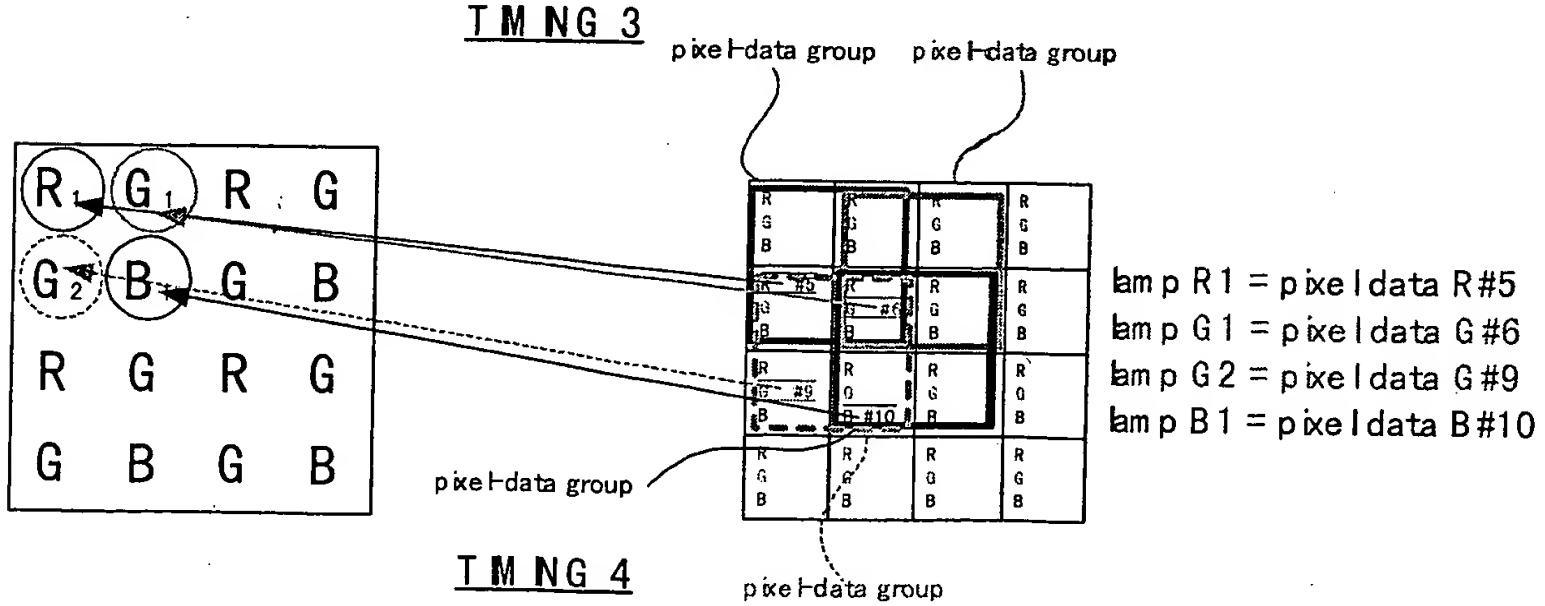
lamp R1 = pixel data R#2
lamp G1 = pixel data G#3
lamp G2 = pixel data G#6
lamp B1 = pixel data B#7

TIMING 2



lamp R1 = pixel data R#6
lamp G1 = pixel data G#7
lamp G2 = pixel data G#10
lamp B1 = pixel data B#11

TIMING 3

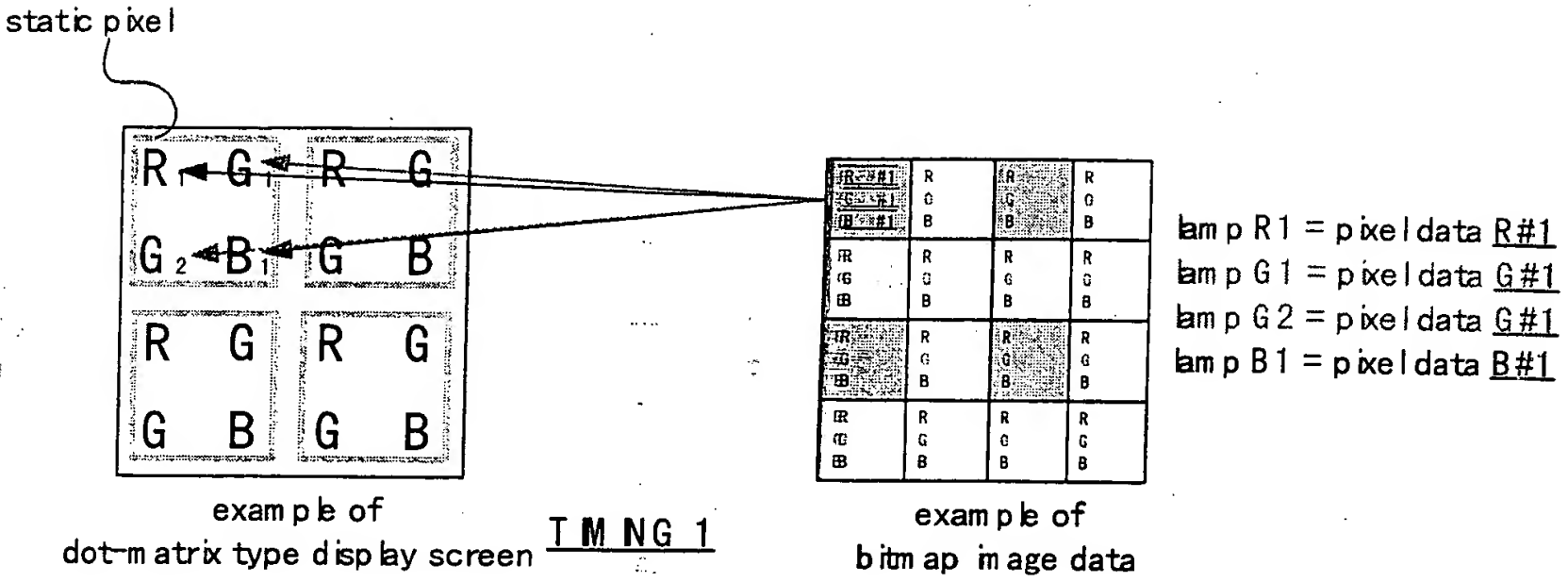


lamp R1 = pixel data R#5
lamp G1 = pixel data G#6
lamp G2 = pixel data G#9
lamp B1 = pixel data B#10

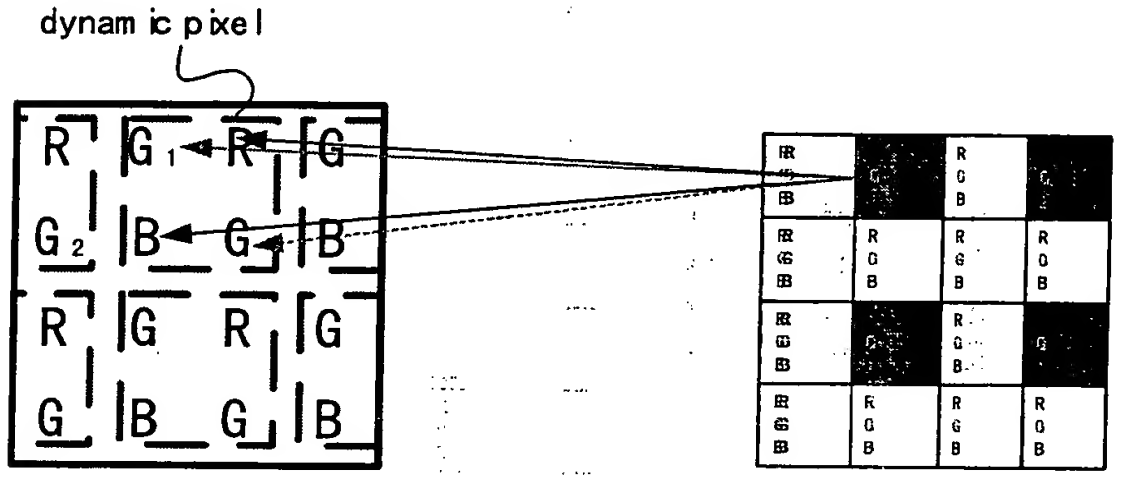
TIMING 4

CONCEPTUAL EXAMPLE OF PHAN

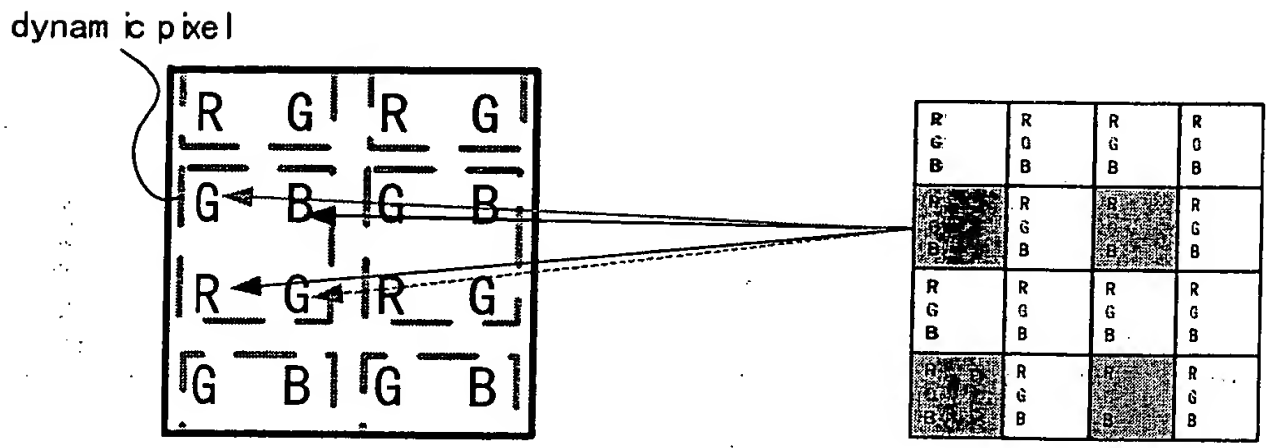
(although not explicitly shown in Phan)



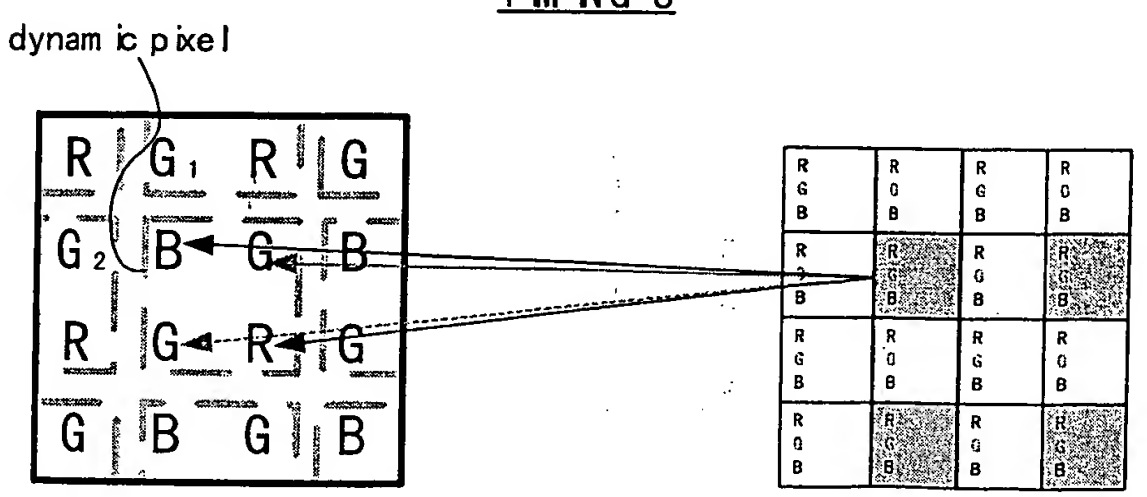
TIMING 1



TIMING 2



TIMING 3



TIMING 4

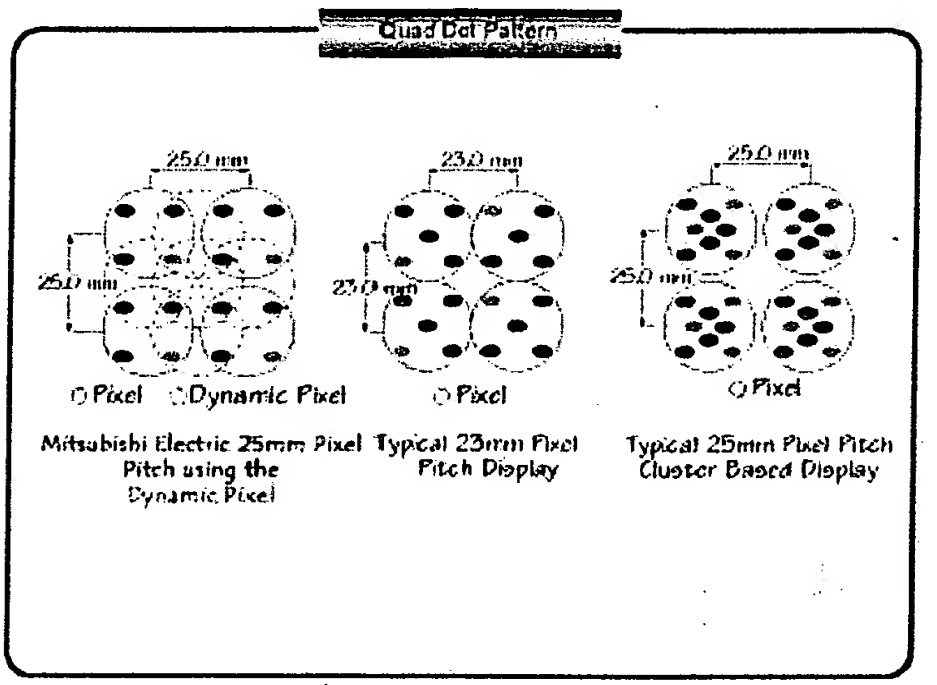
EXHIBIT B

Technology

DIAMOND VISION

The Diamond Vision Advantage - Quad Dot Pattern

Mitsubishi Electric Diamond Vision® screens employ a unique quad dot pattern that uses four do one green, and one blue - to create a color pixel (a "pixel" is a grouping of the smallest element r make a white dot). Most other Large-scale Video Display manufacturers use a cluster or other ty arrangements. The image below compares the Mitsubishi Electric Quad Dot Pattern to two typica arrangements:



The use of the quad dot pattern allows the Diamond Vision® screen processor to share dots bet adjacent pixels. This dot sharing creates an intermediate, or "Dynamic pixel"